

THE UNIBODY VALVE SERIES INNOVATIONS FOR INDUSTRY STANDARDS



THE SIMPLE STORY

The Unibody valve is the only valve in the industry completely engineered and designed with simple, trouble-free configuration, installation, operation and service in mind. Simply choose your valve size and select your actuator. That's it.

Easy to Configure

- Single body construction
- Actuator not dependent on valve

Easy to Operate

- No gaskets or O-rings
- Stainless steel ball
- Dual self-adjusting seats

Easy to Service

- Swing-out body design
- Bi-directional water flow
- Cross-compatibility for trouble-free switching

Easy to Order

- Simplified naming structure
- Only one valve per size - no matter the actuator



THE STRAIGHT FACTS

Strong

- 10 year warranty
- Stainless steel ball
- 250 psi working pressure
- Static pressure tested to 600 psi (EB15-EB35); 500 psi (EB40)
- Vacuum tested to 22 inches of mercury

Reliable

- Corrosion resistant brass alloy body
- Meets or exceeds NFPA 1901 standards
- Super-duty, oversized electric motor (100,000+ lifecycle)

Built

- Body - Cast brass 81-3-7-9 alloy 844, ASTM B584
- Ball - 316 Stainless steel
- Seats - DuPont Hytrel G-6356, Nominal Durometer 63
- Pivot Shaft - Brass bar alloy CDA 360, ASTM B16

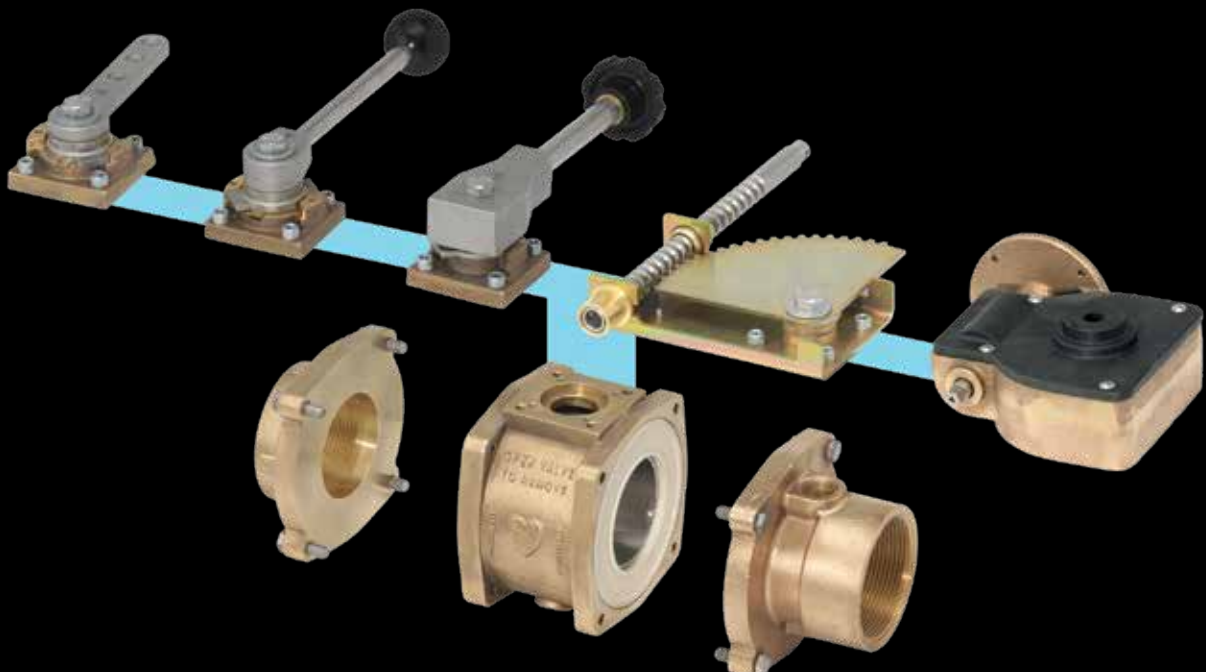
Unibody Valve	Size	Length
EB15	1.5"	3"
EB20	2"	3"
EB25	2.5"	3.5"
EB30	3"	4"
EB35	3.5"	4"
EB40	4"	4"

UNIBODY VALVE INFO

The answer to all your apparatus valve needs — the Unibody Apparatus Valve. The Unibody ball valve has been designed to be dimensionally identical to the Akron Brass heavy-duty apparatus valves for cross compatibility. Additionally, Elkhart's Unibody ball valve has a single body design to simplify both configuration and installation.

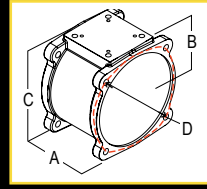
A unique aspect of the Unibody valve actuator is the ability to be easily interchanged among the various Unibody valve sizes to simplify selecting or changing actuators. Just remove 4 bolts, and you can change the actuator on any Unibody Valve without breaking the waterway or internal plumbing.

- Ball valves have dual self-adjusting seats, which provide bi-directional sealing and do not require O-rings that might cut and tear during servicing
- Ball valves feature swing-out construction, which allows for easy access to internal waterway without removing the valve from the truck plumbing
- Butterfly valves are bi-directional
- Adapters (end caps) and pump flanges are constructed of either brass or stainless steel
- Actuators are interchangeable — a valve may be easily converted to different actuation types without the need to break the waterway
- Durable handles and handle stops ensure dependability
- 10 year limited warranty
- Manual handles may be easily changed to different positions by removing a single bolt
- The electric valve utilizes a three-inch extreme duty motor and gearbox for ultimate reliability
- Maximum working pressure rated to 250 psi (SB10, SB15, & EB15-EB35). EB40 rated to 250 psi if flow is in the direction of the arrow and 150 psi if in the opposite direction
- Static pressure tested to 600 psi (SB10, SB15, & EB15-EB35) closed or open. EB40 is static pressure tested to 150/500 psi depending on which side pressure is applied when valve is closed, and 500 psi when valve is open
- The Unibody valves meet or exceed NFPA 1901 standards



BODIES

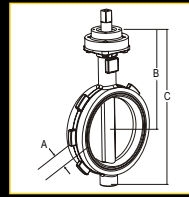
BALL VALVE BODY



MODEL AND DIMENSION KEY

Size	DIMENSIONS				MATERIALS			BALL TYPE	WORKING PRESSURE (psi)	C _v VALUE	ELKHART MODEL	AKRON MODEL
	A	B	C	D*	Body	Ball	Seat					
1½"	3"	2⅞"	4⅞"	4½"	Brass Alloy 844	316 Stainless Steel	Hytrel	Round	250	139	EB15	7615/7815
2"	3"	2⅞"	4⅞"	4½"	Brass Alloy 844	316 Stainless Steel	Hytrel	Round	250	139	EB20	8620/8820
2½"	3½"	2⅞"	5⅞"	5⅞"	Brass Alloy 844	316 Stainless Steel	Hytrel	Round	250	277	EB25	8625/8825
3"	4"	3"	5⅞"	6⅞"	Brass Alloy 844	316 Stainless Steel	Hytrel	Round	250	510	EB30	8630/8830
3½"	4"	3"	5⅞"	6⅞"	Brass Alloy 844	316 Stainless Steel	Hytrel	Round	250	510	EB35	8635/8835
4"	4"	4⅞"	8⅞"	7⅞"	Brass Alloy 844	Manganese Bronze	Hytrel	Flat	250/150	694	EB40	N/A

* Bolt center diameter



Butterfly Valve fits between 150# ANSI flanges. Butterfly Valves do not utilize adapters.

BUTTERFLY VALVE

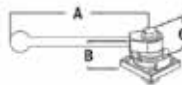
Size	DIMENSIONS			MATERIALS				WORKING PRESSURE (psi)	C _v VALUE	ELKHART MODEL	AKRON MODEL
	A	B	C	Body	Wafer	Shaft	Seat				
3"	1⅞"	7⅞"	11⅞"	Cast Iron	316 Stainless Steel	416 Stainless Steel	EPDM	250	262	EB3B	
4"	2⅞"	8⅞"	13⅞"	Cast Iron	316 Stainless Steel	416 Stainless Steel	EPDM	250	647	EB4B	
	2⅞"	8⅞"	13⅞"	Carbon Steel	316 Stainless Steel	17-4 PH Stainless Steel	PTFE	285	400	EB4J	
5"	2⅞"	9⅞"	14⅞"	Cast Iron	316 Stainless Steel	416 Stainless Steel	EPDM	250	1141	EB5B	
	2⅞"	6⅞"	13⅞"	Carbon Steel	316 Stainless Steel	17-4 PH Stainless Steel	PTFE	285	650	EB5J	
	2⅞"	8⅞"	13⅞"	316 Stainless Steel	316 Stainless Steel	17-4 PH Stainless Steel	PTFE	275	650	EB5S	
6"	2⅞"	9⅞"	15⅞"	Cast Iron	316 Stainless Steel	416 Stainless Steel	EPDM	250	1580	EB6B	
	2⅞"	9⅞"	11⅞"	Ductile Iron	Aluminum/Bronze	416 Stainless Steel	EPDM	250	1950	EB6D	
	2⅞"	9⅞"	15⅞"	Carbon Steel	316 Stainless Steel	17-4 PH Stainless Steel	PTFE	285	1050	EB6J	
8"	2⅞"	9⅞"	15⅞"	316 Stainless Steel	316 Stainless Steel	17-4 PH Stainless Steel	PTFE	275	1050	EB6S	
	2⅞"	11⅞"	18⅞"	Cast Iron	316 Stainless Steel	416 Stainless Steel	EPDM	250	2892	EB8B	
	2⅞"	10⅞"	18⅞"	Carbon Steel	316 Stainless Steel	17-4 PH Stainless Steel	PTFE	285	2200	EB8J	
	2⅞"	10⅞"	18⅞"	316 Stainless Steel	316 Stainless Steel	17-4 PH Stainless Steel	PTFE	275	2200	EB8S	

ACTUATORS

DIRECT HANDLE



DIMENSIONS	INCHES	DESCRIPTION	ELKHART MODEL	AKRON MODEL
Handle Length A (short)	5"	Short	D3F	TS
Handle Length A (long)	9⅞"	Long	D1F	TS
Handle Height B	1⅞"	Short with slow close	D3S	TS
Overall Height C	2¼"	Long with slow close	D1S	TS
Overall Height C (with slow close)	3⅞"	Short with chrome cover	D4F	TSC
		Long with chrome cover	D2F	TSC

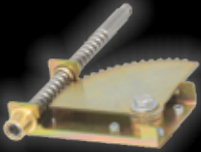


REMOTE HANDLE



DIMENSIONS	INCHES	DESCRIPTION	ELKHART MODEL		AKRON MODEL	
			Self-Locking	Non-Locking		
Handle Length A (short)	4½"		Short	R1F	R3F	R-1
Handle Length A (long)	7"		Long	R2F	R4F	R-2
Handle Height B \perp	1⅝"		Short with slow close	R1S	R3S	R-1
Overall Height C	2¼"		Long with slow close	R2S	R4S	R-2
Overall Height C (with slow close)	3⅞"					

RACK & SECTOR



DIMENSIONS	INCHES	DESCRIPTION	ELKHART MODEL	AKRON MODEL	
Handle Offset A	4⅞"		Standard	S1F	R/S
Handle Height B \perp	1⅞"		Standard with slow close	S1S	R/S
Overall Height C	1⅞"				
Overall Height C (with slow close)	3⅞"				

TWIST LOCK



DIMENSIONS	INCHES	DESCRIPTION	ELKHART MODEL	AKRON MODEL	
Handle Length A	8⅝"		Standard	T1F	SZ
Handle Height B \perp	1⅞"				
Overall Height C	3"				

GEAR



DIMENSIONS	INCHES	DESCRIPTION	ELKHART MODEL	AKRON MODEL	
Handle Offset A	2⅞"		Standard	G1F	G
Handle Height B \perp	1⅞"		High Pressure	G2F*	
Overall Height C	3⅞"				

Hand-wheels are ordered separately

* For use on the EB6D only.

ELECTRIC



E14X
*E16X

DIMENSIONS	INCHES	DESCRIPTION	ELKHART MODEL	AKRON MODEL	
Manual Offset A	2⅞"		Standard	E14X *E16X	E
Motor Length B	10¼"				
Overall Height C	3¾"				

Controllers are ordered separately

* For use on the EB6D only.

SLOW CLOSE



			<p>Slow close may be bolted to remote, direct, and rack & sector actuators.</p>
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GO ELECTRIC

Designed with precision and durability in mind, the electric valve controllers offered by Elkhart Brass provide the most intuitive actuator control in the industry. Utilizing high torque motors, the Elkhart Brass electric actuators provide absolute valve position allowing the operator to monitor and maintain critical pressure and flow requirements.

Easy to Operate

- Durable, over-sized buttons for gloved-hand operation
- Precise command of valve position with simple one-touch control
- Programmable preset for automatic valve positioning

Easy to Monitor

- Displays all critical information in large, easy-to-read format
- 10 valve position segments for quick valve position recognition
- User definable brightness setting for better viewing in varying lighting conditions

Easy to Control

- Heavy duty electric motors provide reliable and continuous control
- Slow close avoids water hammer and damage to plumbing
- Intuitive set up and menu features

APEX™ VALVE CONTROLLER

Combine the customization capabilities with the space saving design, the tactile keypad buttons and large, easy-to-read graphics and the result is an innovative new valve controller that provides benefits to the OEM as well as the end-user. The design and versatility of the APEX allows the OEM to save valuable pump panel space and adapt the controller to any application, while offering only one version of actuator takes the guesswork out of the ordering process. End-users will appreciate the large screen on the APEX with high resolution graphics, while additional features including the adjustable "Target Pressure" indicator and daytime/nighttime screen modes offer benefits to the end-user never seen before in a valve controller. The APEX-S utilizes 10 LED segments for crystal clear valve position recognition and control.

APEX-S



APEX 100



APEX 200



APEX 300



UICS 2



CAF

UBEC 1AT



Tank Fill



Controller Selector Chart

Open/Close	10 LED Position	Pressure	Flow	CAF Mode	Model
•	•				APEX-S
•	•				APEX 100
•	•	•			APEX 200
•	•	•	•		APEX 300
•	•	•		•	UICS 2
•					UBEC 1AT*

Controllers may be networked for primary-secondary operations with remote display

*Available in two tank fill % levels: 50/95.

Choose products from each category to build your Unibody valve system

Model Number Key

EB - - -

Valve body	1.5" Ball valve body	1	5
	2.0" Ball valve body	2	0
	2.5" Ball valve body	2	5
	3.0" Ball valve body	3	0
	3.5" Ball valve body	3	5
	4.0" Flat ball valve body	4	0
	3.0" Butterfly valve body	3	B
	4.0" Butterfly valve body	4	B
	4.0" High performance butterfly valve body	4	J
	5.0" Butterfly valve body	5	B
	5.0" High performance butterfly valve body	5	J
	6.0" Butterfly valve body	6	B
	6.0" High performance butterfly valve body	6	J
	6.0" High performance butterfly valve body (SS)	6	S
	6.0" High efficiency butterfly valve body	6	D
	8.0" Butterfly valve body	8	B
8.0" High performance butterfly valve body	8	J	
8.0" High performance butterfly valve body (SS)	8	S	

Adapters (endcaps)	Inlet	No inlet endcap	0	0	0	0	0	
		Hose thread	EB15 - EB40	H				
		Pipe thread (NPT)		N				
		Victaulic		V				
		Flex hose		F				
		Pump flange		P				
		Solder		S				
		Weld (SS)		W				
		Female	EB15 - EB40	F				
		Male		M				
		Non-gender adapter		A				
		4 bolt (pump flange)		4				
		8 bolt (pump flange)		8				
		Two digit listing	EB15 - EB40		X	X		
	Blank - no taps	EB15 - EB40				B		
	Integrated check valve					C		
	Drain & pressure tap					D		
	Flow sensor port					F		
Outlet	Repeat Inlet Steps	No outlet endcap			0	0	0	0
		Same options as available for inlet end cap	EB15 - EB40					

Valve actuator (remote push/pull rods and assemblies, handwheels, and electric controllers are ordered separately)	No actuator			0	0	0
	Direct handle (long)	EB15 - EB35	D	1		
	Direct handle with chrome cover (long)		D	2		
	Direct handle (short)		D	3		
	Direct handle with chrome cover (short)		D	4		
	Electric	All (except EB6D)	E	1		
	Electric	EB6D	E	2		
	Gear	All (except EB6D)	G	1		
	Gear	EB6D	G	2		
	Remote short handle (self-locking)	EB15 - EB35	R	1		
	Remote long handle (self-locking)		R	2		
	Remote short handle (non-locking)		R	3		
	Remote long handle (non-locking)		R	4		
	Rack & sector		S	1		
	Twist-lock handle		T	1		
	Slow close	(D1, D3, R1, R2, R3, R4 & S1 only)				S
Free close					F	

Example

EB 2 5 - P 4 2 9 B - H M 1 0 D - R 1 F

This is a complete model number for a 2.5" ball valve with: a simple 4 bolt pump flange inlet adapter, a male hose thread outlet adapter with drain tap, a remote push/pull style actuator handle without an additional mechanical slow close device.

